JSXI

Work Order August-28-13 12:			_ 1	*106	19*							Page 1
Item ID:	03199-1 Bracket	B 1 0 6 0	19	Accept	*N900	040	100)*	Setup	Start Stop		S1* S2*
	3/28/13	Start Qty: 40.00 Req'd Qty: 40.00	*/	A* + 44 *	Cust Item I Customer:	D:					1 4	. .
Approvals:	Process Pla	an: MUT	Date: 13-0	8-29 Tooling: SPC (Y/N):		ate:			Run	Start Stop	*N! *N!	R1* R2*
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr										
D3199	Е											
*100 *100* Waterjet		FLOW WATER JET		0.00				44		0		A
FLOW CNC Waterjet	t	Cut as per Down Rev:Prog Rev:	<u>E</u>		17.	•						13.10.30
110		QC2- Inspect parts off ma	achine FAI/FAIB	0.00				ckf		· ^		Δ
110 QC Quality Control		Memo		0.00						9		13.10.30

											DQA:	Dat	e:	f f
NCR:	⁄es	/ No				WORK ORDER NON-O	100	NFORN	ANCE / UPDA	NTE	•		•	
		, -								~	QA Closed:		e:	
Work Orde	or.					DISPOSITION				AGAINST DEI	PARTMENT	PROCESS		
WOIK OIG	- '					Rework	1		Skid-tube	Crosstube	\mathbf{Y}_{p}	Water Jet	\neg	Engineering
Part I	No.					Scrap	1	ſ	Machining	Small Fab		d. Eng. Coor.		Quality
	-					Use-as-is]		oforming	Finishing	Rec/Stor	e/Packaging		Other
NCR I	۷o					Work Order Update]		Large Fab	Composite		Supplier		
Root					Descri	otion of work order update		Initial	Actio	n	Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descrip	tion	Date	Verification	1	QC Inspector
Doc/Data	Ш										1			
Equip/Tooling	Ш													
Operator	Ц													
Material	Ш												1	
Setup	Ш					•								
Other	Ш													
Process	Ш						1						l	
Supplier				1 1										
Training			1											
Unapproved														
						<u> </u>	AUI	LT CATE	GORY					
Landi	ing G	Gear				General		-			•	-		
		Bending				Bend	L	Grain			Ovalized			Pressure/Forced
İ		Centre N	ot Conce	ntric to O	/s	BOM/Route		Hardwa	re		Over/Under	tolerance		Temperature/Cure
1		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct		Weld
		Crushed/	Crimped			Burrs		Instruct	ions Incomplete/Un	clear	Part Lost/M	issing		Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		Part Moved			
		Heat Tre	at			Countersink		Mislabe	led		Positioned V	Vrong		
		Inspectio	n Strip in	Tube		Cut Too Short		Misread	i		Power Loss/	Surge		Other
		Ripples i	n Bend			Drill Holes	Г	Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde August-28-13 1		6019		*100	3019*						ANT 8.8 TO 1.1 T	Page 2	· · · · · · · · · · · · · · · · · · ·
Item ID: Revision ID: Item Name:	D3199-1 Bracket			Accept	*N900	<u>)</u> 040	100)*	Setup	Start Stop	171	S1* S2*	
Start Date: Required Date: Reference:	8/28/13 : 8/28/13	Start Qty: 40.00 Req'd Qty: 40.00	*40: *40:		Cust Item Customer					6 4. 4			
Approvals:		an:	Date:	Tooling: SPC (Y/N):		Date: Date:			Run	Start Stop		R1* R2*	
Sequence ID/ Work Center I 120 *120 QC Quality Control	D	Operation Description QC8- Inspect parts - seco	nd check	Set Up/ Run Hours 0.00 27 9-89	Tool ID	Tool #	Plan Code	Accep Qty Qty	ot Rej Qty	•	Reject Number	Insp. Stamp	
130 *130* Small Fab Small Fab		Small Fab Memo Form as per	dwg D3199 use DT972.	0.00 0.00				<u> વ</u> વ	ı — —	, , , , , , , , , , , , , , , , , , , 		<i>r</i> .	3/0
140 *140* QC Quality Control		QC5- Inspect part comple	eteness to step on W/O	0.00 DAS 27 9-89 0.00 S	9			<u>44</u>					

										DQA:	Date:	
NCR: Ye	es / No				WORK ORDER NON-	COI	VFORM	MANCE / UPDATE		•		
										QA Closed:	Date:	
Med Order		···			DISPOSITION			AGA	INST DE	PARTMENT,	/PROCESS	
Work Order	T				Rework	ı İ		Skid-tube Cross	tube		Water Jet	Engineering
Part No	0				Scrap	1		Machining Small	<u> </u>	Pro	d. Eng. Coor.	Quality
7 01 (14)					Use-as-is	1		Ŭ ⊢	hing	1	re/Packaging	Other
NCR N	lo.				Work Order Update	1		Large Fab Compo		,,	Supplier	
					<u>'</u>	_		·		•		
Root				Descri	ption of work order update	Π	Initial	Action		Sign &		
Cause	Date	Step	Qty	,	or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator						1				ļ		
Material						ļ	٠				i	
Setup						1						
Other				1				•				
Process	_											
Supplier	_											
Training												
Unapproved			J	<u> </u>					.	<u> </u>		
						AUI	LT CATE	GORY				
Landin	ng Gear				General		Jan-1-		F	المستنسسة	Г	70
}	Bendin	-		_ <u> </u>	Bend	\vdash	Grain		-	Ovalized	<u> </u>	Pressure/Forced
<u> </u>		Not Conce	ntric to	U/S -	BOM/Route	\vdash	Hardwa		\vdash	Over/Under	}	Temperature/Cure
	Cracks	1/6:5		-	Broken/Damaged	\vdash	-1	ion Incomplete	-	Part Incorre		Weld
	Crushe	d/Crimped			Burrs	1	Instruct	ions Incomplete/Unclear	L.	Part Lost/Mi	ISSING	Wrong Stock Pulled
	Cuffs				Contamination		Mainte	nanco		Part Moved		

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Cut Too Short Drill Holes

Drawing Finish

Folio

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Work Orde		6019		*106	019 *							Page 3	;
Revision ID:	D3199-1 Bracket			Accept	*N900	040 <i>°</i>	100) *	Setup	Start Stop		S1* S2*	
	8/28/13 8/28/13	Start Qty: 40.00 Req'd Qty: 40.00	*40* *40*		Cust Item II Customer:	D:							
Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):		nte:			Run	Start Stop		R1* R2*	
Sequence ID/ Work Center II 150 *150* Powdercoat Powder Coating	D	Operation Description Grey Sandtex(Ref.4.3.5.6 Memo START TIM OVEN TEM FINISH TIM	e: 7,30 perature: 30°	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty 44	Qty	, I	Reject Number 3-//- 4	Insp. Stamp	DA 34 9-8
*160 *160* QC Quality Control		QC3- Inspect Part Finish Memo		0.00 das 27 0.009-89 13 11.07			,	44					
170 *170* Packaging		Identify as per dwg & Sto	ock Location: 5723(0.00				44,	X —			DAS 26 	-

Packaging

											DQA:	Date:	•
NCR: Y	es /	No				WORK ORDER NON-C	CON	VFORI	MANCE / UPDA		0.4.61	0.1	
						T					QA Closed:	Date:	
Work Orde						DISPOSITION				AGAINST DEF	PARTMENT	/PROCESS	
work Orde						Rework	1		Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo.					Scrap	1		—	Small Fab	Pro	d. Eng. Coor.	Quality
1 4101						Use-as-is	1		noforming	Finishing		re/Packaging	Other
NCR N	lo.					Work Order Update	1		~ 	Composite	•	Supplier	
							-						
Root					Descri	ption of work order update		nitial	Action	1	Sign &		
Cause	1	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Descript	tion	Date	Verification	QC Inspector
Doc/Data							1		1				
Equip/Tooling													
Operator							İ						
Material											!		
Setup							İ						
Other	_												
Process							1						
Supplier													
Training	Щ									-			
Unapproved					1		0.111	TCATE	CORV		<u> </u>		
						General	AUL	T CATE	GURY				
Landi	ng Gea					Bend		Grain			Ovalized		Pressure/Forced
		nding	ot Concei	atric to	~ -	BOM/Route	\vdash	Hardwa	ro	 	Over/Under	tolerance	Temperature/Cure
	$\boldsymbol{\vdash}$	acks	or concei	ithe to	^{0/3} -	Broken/Damaged	\vdash	-1	ion Incomplete		Part Incorre	 	Weld
	⊢		Crimped		 	Burrs	-	- i	ions Incomplete/Unc	rlear	Part Lost/Mi		Wrong Stock Pulled
		iffs	CHAIPEU		<u> </u>	Contamination	\vdash	Mainte		—	Part Moved		7 9 anca
		eat Trea	ıt			Countersink	\vdash	Mislabe		—	Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Other

Power Loss/Surge

Turning Sequence
Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing Finish

Folio

Work Orde		6019				Page 4						
Revision ID:	D3199-1 Bracket			*N900040100)* s	Setup	Start Stop		S1* S2*
Start Date: Required Date: Reference:	8/28/13 8/28/13	Start Qty: 40.00 Req'd Qty: 40.00	*40* *40*		Cust Item I Customer:	D:						
	Process Pla	an:	Date:	Tooling:	Da	nte:	-	I	Run	Start	*N	R1*
ripprovaisi	QC:		Date:	SPC (Y/N):	Da	ıte:				Stop	*N	R2*
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
180		QC21- Final Inspection -	Work Order Release	0.00								
18\\(\Omega\) QC Quality Control		Memo		0.00				ML		13	-1)-	<u>25 </u>

NCR: Ye	es / No				WORK ORDER NON-C	CONFO	RMANCE / U	JPDATE	DQA:		
					DISPOSITION	T	·	AGAINST DI	QA Closed: EPARTMENT		:
Work Order Part No	0				Rework Scrap Use-as-is Work Order Update	The	Skid-tube Machining ermoforming Large Fab	Crosstube Small Fab Finishing Composite	⊣	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initia		Action	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief E	ng De	escription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved								·			
					F	AULT CA	TEGORY				
Landin	Bending Centre N Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in Torque V Turning S	/Crimped at on Strip in n Bend Vaves in I	ı Tube Extrusion		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish	Insp Instr Mai Misl Misr Offs	lware ection Incomplete ructions Incomple ntenance abeled read		Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned \(\) Power Loss/	ct issing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
†	Wave/Tv	vist in Tul	be		Folio	Out	side Dimensions				

August-28-13 12:29:34 PM

Work Order ID:

106019

Parent Item:

D3199-1

Parent Item Name:

Bracket

Start Date: 8/28/13

Required Date: 8/28/13

Start Qty: 40.00

Required Qty: 40.00

Comments:

IPP Rev:C IPP Rev:D Removed Scribing As per Rev B

05-11-05 06-11-24

JLM JLM

IPP Rev:E 11.03.31 as per ecn 11-

	531 DD verf:EC												
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA 304/316 .040 Sheet		Purchased	No			100	sf	258.7386	0.099	4.16842	Ae	_13	10.30
				Location		Loc Oty	Lo	c Code					
				MAT020		258.73861							
				1	24029	117.15							
				i	24956	73.89861							
					n125754	67.69							

126852 - 4.58

											DQA:	Date:	
NCR: Y	'es /	No				WORK ORDER NON-C	100	NFOR	MANCE / UPDATE		QA Closed:	Date:	
							- 1						
Work Orde	er:					DISPOSITION			AGAI	IST DE	PARTMENT	PROCESS	
Part N						Rework Scrap Use-as-is			Skid-tube Crosstu Machining Small I noforming Finish	Fab		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	No					Work Order Update]		Large Fab Compos	site		Supplier	
Root					Descri	ption of work order update	Π	Initial	Action		Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector
Doc/Data												-	
Equip/Tooling													
Operator	Ш												
Material	Ш												
Setup													·
Other													
Process				ļ									
Supplier												1	
Training													
Unapproved													
						F	AUI	LT CATE	GORY				
Landi	ng Gea	ar				General		•		_	•		7
	В€	ending				Bend		Grain			Ovalized	<u></u>	Pressure/Forced
	∐ C€	entre No	ot Conce	ntric to	o/s	_BOM/Route	L	Hardwa	are		Over/Under	tolerance	Temperature/Cure
	Cr	acks				Broken/Damaged		Inspect	ion Incomplete		Part Incorred	ct	Weld
	Cr	ushed/	Crimped			Burrs		Instruc	tions Incomplete/Unclear		Part Lost/Mi	issing	Wrong Stock Pulled
	Cu	uffs				Contamination		Mainte	enance		Part Moved		
	Пн	eat Trea	at			Countersink	Г	Mislab	eled		Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

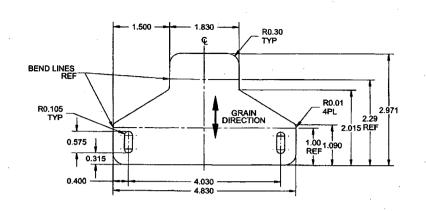
DART AEROSPACE LTD	Work Order:	106619
Description: Bracket	Part Number:	D3199-1
Inspection Dwg: D3199 Rev: E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

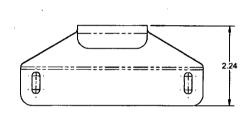
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.210	+0.005/-0.001	1209			V	JKm-01
0.575	+/-0.010	.571	•		V	DKm-01
1.090	+/-0.010	1,090	~		v.	
2.015	+/-0.010	2.015			V	
2.971	+/-0.010	2.978	_		V	
1.830	+/-0.010	1,830	-		v	
4.830	+/-0.010	4,835	-		V	
4.030	+/-0.010	4,030	-		٧	
			DA	d		

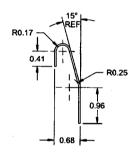
				,
Measured by:	Audited by:	9-89	Preliminary Approval:	
Date: 13.10.30	Date:	13.1031	Date:	

Rev	Date	Change	Revised by	Approved/
Α	06.10.20	New Issue	KJ/JLM	
В	06.11.24	Dwg Revision revised	KJ/JLM	/ //
С	11.03.08	Dwg Rev updated	KJ 10-	
D	12.02.06	Dwg Rev updated	KJ de	
			. 1/1	



D3199-1F FLAT PATTERN





D3199-1 BRACKET MADE FROM D3199-1F

DESIGN DAPT AEDOCRACE LTD				
REV.	DESCRIPTION		DATE	
Α	NEW ISSUE	CP	03.08.05	
В	2.24 WAS 2.142; ADD FINISH; UPDATE DWG	СВ	06.11.01	
С	ADD -3/-4 PART (SHEET 2-4)	HS	09.11.19	
D	RE-DESIGNED 03199-3/-4/-3F PER CUSTOMER FEEDBACK TO ELIMINATE BINDING OF DOOR ONCE BRACKETS ARE INSTALLED. REF.: PAR11-78	МВ	11.03.21	
E	RE-DESIGNED D3199-3/-4/-3F PER CUSTOMER FEEDBACK TO OPTIMIZE FIT.	МВ	11.07.11	

DESIGN	1 98	□ DART AEROSPACE LTD			
DRAWN		HAWKESBURY, ONTARIO, CANADA			
CHECKED -	IP.	DRAWING NO.	REV. E		
MFG. APPR.	R	D3199	SHEET 1 OF 4		
APPROVED	بسر	TITLE	SCALE		
DE APPR.	4	BRACKET	NT\$		
DATE 11 (17 11	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PROVIDE AND CONTROVEN AND IS SUPPLIED ON THE COMESS CONCINION THAT IT IS			

NOTES:
1) MATERIAL: AISI 304/316 SS SHEET, 0.040 THICK, ANNEALED, 2B FINISH
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240
REP DART SPEC M304520GA
2) FINISH: POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
8) IDENTIFICATION: IDENTIFY WITH DART PIN "D3199-X" AND B/N "BXXXXX" PER QSI 044 6.1
7) WEIGHT: D3199-1 = 0.11 lbs, D3199-3/-4 = 0.26 lbs EACH

SH

PSOD: 1

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